23 -continued

Ingredient	VA	VB	VC	VD	VE
Color Solution (1%)	0.05	0.05	0.50	0.75	0.175
Flavor					0.15
Coolant			0.02	0.05	0.02
VBE	0.01	0.05	0.005		0.001
Capsaicin				0.005	
Piperine			0.005		
Zingerone	0.02		0.01	0.02	
Vanitrope	0.02	0.08	0.04	0.08	
Glycerin USP 99.7%	9.00	11.85	33.164	9.00	
Poloxamer 407 NF			1.00		0.20
Tetra Potassium Pyrophosphate (60%	6.38				
Soln)					
Propylene Glycol USP Crest			10.00		
Saccharin Sodium USP Granular	0.46	0.50	0.45	0.40	0.58
Sodium Acid Pyrophosphate	2.10			4.00	1.00
Silica Abrasive	22.00	31.00	20.00	21.00	17.00
Silica Thickening			2.00		
Sodium Bicarbonate USP		1.50	9.00		
Sodium Carbonate Anhydrous NF		0.50			
Sodium Hydroxide 50% Solution			1.74	2.20	
Sodium Lauryl Sulfate (27.9% soln)	4.00	5.00	3.00	4.00	4.00
Sodium Monofluorophosphate	0.76	0.76	0.76	0.76	0.76
Sorbitol Solution USP	24.28	24.54	3.985	44.686	56.885
Tetra Sodium Pyrophosphate, Anhydrous	2.05	5.045	3.85		3.85
Titanium Dioxide	0.50		1.00		0.25
Titanium Dioxide/Carnauba Wax Prills		0.60		0.30	
Water, Purified, USP	QS	QS	QS	QS	QS

The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical 30 values recited. Instead, unless otherwise specified, each such dimension is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension disclosed as "40 mm" is intended to mean "about 40 mm."

Every document cited herein, including any cross referenced or related patent or application is hereby incorporated herein by reference in its entirety unless expressly excluded or otherwise limited. The citation of any document is not an admission that it is prior art with respect to any invention 40 disclosed or claimed herein or that it alone, or in any combination with any other reference or references, teaches, suggests or discloses any such invention. Further, to the extent that any meaning or definition of a term in this document conflicts with any meaning or definition of the same term in a document incorporated by reference, the meaning or definition assigned to that term in this document shall govern.

While particular embodiments of the present invention have been illustrated and described, it would be obvious to 50 those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

## What is claimed is:

- 1. A method for improving taste of an oral care composition, comprising:
  - mixing into an oral care composition, vanitrope; from 60 about 0.001% to about 0.025% by weight of the composition, vanillyl butyl ether; from about 0.01% to about 0.15%, by weight of the composition, zingerone; and from about 0.05% to about 11%, by weight of the composition, metal salt selected from the group consisting of 65 a zinc salt, stannous salt, potassium salt, copper salt, and mixtures thereof.

- 2. The method of claim 1, further comprising adding capsaicin, capsiate, shoagol, gingerol, piperine, or a combination thereof, to the oral care composition.
- 3. The method of claim 1, further comprising adding to the oral care composition a TRPV1 enhancer selected from the group consisting of damascone, geranyl butyrate, 2-octanone, 35 furfural, ionone, 2,6-dimethyl-5-heptenal, tetrasodium pyrophosphate, alpha dimethyl phenethyl acetate, phenylacetaldehyde dimethyl acetal, kephalis, linalool oxide, carvyl acetate, farnesene, trans-2-hexenyl acetate, heptyl alcohol, and combinations thereof.
  - 4. The method of claim 1, wherein the vanilly butyl ether is present in an amount from 0.002% to 0.02% by weight of the oral care composition.
  - 5. The method of claim 1, wherein the stannous salt is present and is selected from the group consisting of stannous fluoride, stannous chloride, stannous iodide, stannous chlorofluoride, stannous actetate, stannous hexafluorozirconate, stannous sulfate, stannous lactate, stannous tartrate, stannous gluconate, stannous citrate, stannous malate, stannous glycinate, stannous pyrophosphate, stannous metaphosphate, stannous oxalate, stannous phosphate, stannous carbonate, and combinations thereof.
- 6. The method of claim 1, wherein the zinc salt is present and is selected from the group consisting of zinc fluoride, zinc 55 chloride, zinc iodide, zinc chlorofluoride, zinc acetate, zinc hexafluorozirconate, zinc sulfate, zinc lactate, zinc tartrate, zinc gluconate, zinc citrate, zinc malate, zinc glycinate, zinc pyrophosphate, zinc metaphosphate, zinc oxalate, zinc phosphate, zinc carbonate, zinc oxide, and combinations thereof.
  - 7. The method of claim 1, wherein the potassium salt is present and is selected from the group consisting of potassium nitrate, potassium citrate, potassium oxalate, potassium bicarbonate, potassium acetate, potassium chloride, and combinations thereof.
  - 8. The method of claim 1, wherein the vanitrope is present in an amount from about 0.01% to about 0.15% by weight of the oral care composition.